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ERICSSON INC. 6300 LEGACY DRIVE M/S EVR 1-C-11 PLANO, TX 75024			EXAMINER ZELASKIEWICZ, CHRYSTINA E	
			ART UNIT 3621	PAPER NUMBER
			NOTIFICATION DATE 05/04/2012	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/595,001

Applicant(s)

AHLBACK ET AL.

Examiner

CHRYSTINA ZELASKIEWICZ

Art Unit

3621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 February 2012.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Acknowledgements

1. This action is in reply to the Amendment filed on February 29, 2012.
2. Claims 1-14 are pending.
3. Claims 1-14 are examined.
4. This Office Action is given Paper No. 20120427 for references purposes only.

Claim Rejections - 35 USC § 112, 1st paragraph

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claim 14 is rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement.
7. The claim contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.
8. Specifically, claim 14 was amended to include a processor, a main memory coupled to the processor, and persistent storage associated with the processor.
9. Based upon a review of the original disclosure, Examiner finds that the "a processor, a main memory coupled to the processor, and persistent storage associated with the processor" are not necessarily present in the original disclosure. Although

Applicant does have support for a NAF nodes (as disclosed on page 5 of the original specification), a NAF node is not necessarily structurally the same as a processor, a main memory coupled to the processor, or persistent storage.

10. In response to said rejection, Applicant should specifically point to his disclosure (e.g. drawings, specification paragraphs, etc) to show where support exists for "a processor, a main memory coupled to the processor, and persistent storage associated with the processor" in claim 14.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nevoux et al. (US 5,412,726) in view of Uhlik (US 7,849,173).

Claims 1, 14

13. Nevoux discloses the following limitations:

- a. upon receipt of the request (request, see C7 L45-55) at said node, sending an authorization request (credit authorization request, see C7 L65 – C8

- L2) from said node to an online charging system (authorization center CA, see C7 L65 – C8 L2, figure 1) of the subscriber's home network;
- b. in the event that an accept service request message (remote loading passkey, see C8 L29 – C9 L67) is received by said node, sending the requested accounting certificate (amount to be remotely loaded C1, see C9 L45 – C10 L11) to the subscriber terminal.
14. Nevoux does not disclose the following limitations:
- c. Sending a request... network;
 - d. At the online charging system... data;
 - e. Sending the accounting certificate... paid for.
15. Uhlik teaches the following limitations:
- f. sending a request (purchase order for a unit of service, see C15 L19-30) for an accounting certificate (certificate, see C15 L19-30) from a subscriber's mobile terminal (user terminal, see C15 L41-63) to a certificate issuing node (gateway, see C15 L19-30) in a visited network (while roaming, see C9 L26-34);
 - g. at the online charging system (aggregator, see C15 L41 – C16 L6), returning either an accept or deny service request message (verifies certificate, see C16 L24-31) for the accounting certificate (certificate, see C16 L24-31) to said node (gateway, see C16 L24-31), based on the subscriber's account data (e.g. credit card, see C15 L41 – C16 L11);
 - h. sending the accounting certificate (transfer the specified value, see C16 L32-40) from the subscriber terminal (user terminal, see C16 L32-40) via the

mobile communications network to a provider (WLAN operator, see C16 L32-40) of a product or service to be paid for.

16. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the remote loading process of Nevoux with the certificate verification of Uhlik because 1) a need exists for a telecommunication installation capable of ensuring confidentiality and integrity of a remote loading order and its amount, even when the subscriber is in a roaming region (Nevoux C2 L21-57); and 2) a need exists for a wireless infrastructure that can provide ubiquitous wireless Internet access (Uhlik C2 L1-15). Sending a request for a purchase order of a unit of service, verifying the certificate, and transferring the value will ensure that a subscriber selects a service that best matches his needs while establishing a valid session for Internet access (Uhlik C16 L24-31).

17. Alternatively, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the remote loading process of Nevoux with the certificate verification of Uhlik since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable. Sending a request for a purchase order of a unit of service, verifying the certificate, and transferring the value will ensure that a subscriber selects a service that best matches his needs while establishing a valid session for Internet access (Uhlik C16 L24-31).

Claim 2

18. Nevoux in view of Uhlik discloses all the limitations above. Furthermore, Nevoux discloses the following limitations:

- i. said online charging system (authorization center CA, see C7 L65 – C8 L2, figure 1) to which said authorization request (credit authorization request, see C7 L65 – C8 L2) is sent is responsible for coordinating all charges (remote loading, see C7 L23-37) made against subscribers of the home network.

Claim 3

19. Nevoux in view of Uhlik discloses all the limitations above. Furthermore, Nevoux discloses the following limitations:

- j. wherein said certificate issuing node (subscriber access system SAA, see C4 L29-67, figure 1) is owned by the operator of an access network (network, see C4 L53-57) used by the subscriber terminal (autonomous set PA, see C4 L29-67, figure 1).

Claim 4

20. Nevoux in view of Uhlik discloses all the limitations above. Furthermore, Nevoux discloses the following limitations:

- k. the access network (network, see C4 L53-57) is provided by the operator of the subscriber's home network, or by a visited network (roaming region, see C2 L52-57).

Claim 5

21. Nevoux in view of Uhlik discloses all the limitations above. Furthermore, Nevoux discloses the following limitations:

- I. said certificate issuing node (subscriber access system SAA, see C4 L29-67, figure 1) comprises a Public Key Infrastructure portal, which uses shared secret keys (secret passkey, see C5 L25 – C6 L55) to communicate with a subscriber terminal.

Claim 6

22. Nevoux in view of Uhlik discloses all the limitations above. Furthermore, Nevoux discloses the following limitations:

- m. the Public Key Infrastructure portal communicates with a Bootstrapping Server Function of the subscriber's home network to obtain a shared secret (secret passkey, see C5 L25 – C6 L55) previously agreed between the Bootstrapping Server Function and the subscriber terminal.

Claim 7

23. Nevoux in view of Uhlik discloses all the limitations above. Furthermore, Nevoux discloses the following limitations:

- n. the Public Key Infrastructure portal obtains the shared secret (secret passkey, see C5 L25 – C6 L55) after receiving a request (request, see C7 L7-55)

for an accounting certificate (remote loading of n value units, see C7 L45-55)
from the subscriber terminal.

Claim 8

24. Nevoux in view of Uhlik discloses all the limitations above. Furthermore, Nevoux discloses the following limitations:

o. the Public Key Infrastructure portal communicates with the subscriber's home network to obtain the identity of the responsible online charging system (authorization center CA, see C7 L65 – C8 L2, figure 1) prior to sending said authorization request (request, see C6 L64 – C7 L55), or for authorization to issue accounting certificates.

Claim 9

25. Nevoux in view of Uhlik discloses all the limitations above. Nevoux does not disclose the following limitations:

p. The provider... settlement.

26. Uhlik teaches the following limitations:

q. the provider of a product or service (content service provider, see C7 L58 – C8 L3) to be paid for, sends received accounting certificates to said certificate issuing node for settlement (solicit payment authorization certificates from subscribers, see C13 L58-67).

27. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the remote loading process of Nevoux with the settlement of payment authorization certificates of Uhlik because 1) a need exists for a telecommunication installation capable of ensuring confidentiality and integrity of a remote loading order and its amount, even when the subscriber is in a roaming region (Nevoux C2 L21-57); and 2) a need exists for a wireless infrastructure that can provide ubiquitous wireless Internet access (Uhlik C2 L1-15). Settlement of payment authorization certificates will ensure that each party is properly paid (Uhlik C13 L58-67).

Claim 10

28. Nevoux in view of Uhlik discloses all the limitations above. Nevoux does not disclose the following limitations:

r. The online... paid for.

29. Uhlik teaches the following limitations:

s. the online charging system reports previously reserved credit as used and withdrawn (e.g. used 2 units, see C8 L42 – C9 L10), when a service has been delivered and a signed invoice received from the provider of a product or service to be paid for.

30. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the remote loading process of Nevoux with the settlement of payment authorization certificates of Uhlik because 1) a need exists for a telecommunication installation capable of ensuring confidentiality and integrity of a

remote loading order and its amount, even when the subscriber is in a roaming region (Nevoux C2 L21-57); and 2) a need exists for a wireless infrastructure that can provide ubiquitous wireless Internet access (Uhlik C2 L1-15). Settlement of payment authorization certificates will ensure that each party is properly paid (Uhlik C13 L58-67).

Claim 11

31. Nevoux in view of Uhlik discloses all the limitations above. Nevoux does not disclose the following limitations:

t. The provider... issuing node.

32. Uhlik teaches the following limitations:

u. the provider of a product or service (content service provider, see C7 L58 – C8 L3) sends an invoice (account statement, see C7 L58 – C8 L3) to the subscriber terminal (subscriber, see C7 L58 – C8 L3) for products or services which the subscriber proposes to purchase and, after receipt of this invoice, the subscriber terminal sends the request for the accounting certificate to the certificate issuing node (authenticator, see C7 L58 – C8 L3).

33. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the remote loading process of Nevoux with the account statement of Uhlik because 1) a need exists for a telecommunication installation capable of ensuring confidentiality and integrity of a remote loading order and its amount, even when the subscriber is in a roaming region (Nevoux C2 L21-57); and 2) a need exists for a wireless infrastructure that can provide ubiquitous wireless Internet access (Uhlik

C2 L1-15). An account statement will ensure that each party is properly billed for services (Uhlik C7 L58 – C8 L3).

Claim 12

34. Nevoux in view of Uhlik discloses all the limitations above. Furthermore, Nevoux discloses the following limitations:

- v. the request (request, see C7 L7-55) for an accounting certificate (remote loading of n value units, see C7 L45-55) is sent prior to receipt of the invoice (reach or exceed threshold, see C7 L15-20) at the terminal.

Claim 13

35. Nevoux in view of Uhlik discloses all the limitations above. Nevoux does not disclose the following limitations:

- w. Said accounting... network.

36. Uhlik teaches the following limitations:

- x. said accounting certificate is secured by bootstrapping on an authentication and shared secret agreement procedure (operator's secret key, see C14 L17-39) performed between the mobile terminal and the subscriber's home network.

37. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the remote loading process of Nevoux with the shared secret of Uhlik because 1) a need exists for a telecommunication installation capable of ensuring

confidentiality and integrity of a remote loading order and its amount, even when the subscriber is in a roaming region (Nevoux C2 L21-57); and 2) a need exists for a wireless infrastructure that can provide ubiquitous wireless Internet access (Uhlik C2 L1-15). The operator's secret key will ensure secret communications (Uhlik C14 L17-39).

Response to Arguments

38. Applicant argues that a "node" in the telecommunications field inherently requires a computer (Amendment p 5-6).

y. Examiner disagrees. Applicant has not lexicographically defined the term, nor invoked 35 USC 112 6th paragraph. Absent these considerations and under the broadest reasonable interpretation standard, Examiner cites a definition of "node" that does not inherently require a computer (see Claim Interpretation below). If Applicant were to submit other evidence, such as a dictionary definition that would indicate a "node" inherently requires a computer (or a processor, a main memory coupled to the processor, and persistent storage associated with the processor), then Examiner would remove the rejection.

39. Applicant argues that the prior art does not teach issuance of an accounting certificate to a subscriber in a visited network (Amendment p 7-9).

z. Examiner disagrees. Uhlik teaches sending the accounting certificate (transfer the specified value, see C16 L32-40) from the subscriber terminal (user

terminal, see C16 L32-40) via the mobile communications network to a provider (WLAN operator, see C16 L32-40) of a product or service to be paid for.

aa. Note, that the request (purchase order for a unit of service, see C15 L19-30) for an accounting certificate (certificate, see C15 L19-30) is so the subscriber (user terminal, see C15 L41-63) can access services in a visited network (while roaming, see C9 L26-34).

bb. Additionally, Nevoux discloses remote loading, which serves the same function as an accounting certificate (i.e. payment of services) (see C9 L45 – C10 L11).

Claim Interpretation

40. Unless expressly noted otherwise by Examiner, Examiner maintains her position on claim interpretation as noted in the September 30, 2011 Non Final Office Action, Paragraph Nos. 47-55 (Paper No. 20110927).

41. After another careful review of the original specification and unless expressly noted otherwise by Examiner, Examiner maintains her position that Applicant is not his own lexicographer. See MPEP § 2111.01 IV.

42. After review of the February 29, 2012 Claim Amendments, Examiner finds that because the examined claims recite neither “step for” nor “means for,” the examined claims fail Prong (A) as set forth in MPEP §2181 I. Because all examined claims fail Prong (A), Examiner concludes that all examined claims do not invoke 35 U.S.C. §112, 6th paragraph. See also Ex parte Miyazaki, 89 USPQ2d 1207, 1215-16 (B.P.A.I. 2008)

(precedential).

43. Examiner hereby adopts the following definitions under the broadest reasonable interpretation standard. In accordance with *In re Morris*, 127 F.3d 1048, 1056, 44 USPQ2d 1023, 1029 (Fed. Cir. 1997), Examiner points to these other sources to support her interpretation of the claims.¹ Additionally, these definitions are only a guide to claim terminology since claim terms must be interpreted in context of the surrounding claim language. Finally, the following list is not intended to be exhaustive in any way:

cc. **element** “n. 1. Any stand-alone item within a broader context. For example, a data element is an item of data with the characteristics or properties of a larger set.” Computer Dictionary, 5th Edition, Microsoft Press, Redmond, WA, 2002;

dd. **for** “1 a – used as a function word to indicate purpose.” Webster’s Ninth New Collegiate Dictionary, Merriam-Webster, Inc., Springfield, MA, 1986;

ee. **memory** “A device where information can be stored and retrieved.” Computer Dictionary, 5th Edition, Microsoft Press, Redmond, WA, 2002;

ff. **network** “A group of computers and associated devices that are connected by communications facilities.” Computer Dictionary, 3rd Edition, Microsoft Press, Redmond, WA, 1997;

gg. **node** “n. 1. A junction of some type.” Computer Dictionary, 5th Edition, Microsoft Press, Redmond, WA, 2002;

¹ While most definitions are cited because these terms are found in the claims, Examiner may have provided additional definition(s) to help interpret words, phrases, or concepts found in the definitions themselves or in the prior art.

- hh. **port** "1. An interface through which data is transferred between a computer and other devices (such as a printer, mouse, keyboard, or monitor), a network, or a direct connection to another computer... Ports may also be dedicated solely to input or to output." Computer Dictionary, 5th Edition, Microsoft Press, Redmond, WA, 2002;
- ii. **system** "n. Any collection of component elements that work together to perform a task. Examples are a hardware system consisting of a microprocessor, its allied chips and circuitry, input and output devices, and peripheral devices; an operating system consisting of a set of programs and data files; or a database management system used to process specific kinds of information." Computer Dictionary, 5th Edition, Microsoft Press, Redmond, WA, 2002; and
- jj. **terminal "(4) (networks)** A point at which any element may be directly connected to one or more other elements." IEEE 100 The Authoritative Dictionary of IEEE Standards Terms, 7th Edition, IEEE, Inc., New York, NY, Dec. 2000.
44. In light of Applicants' choice to pursue product claims (claim 14), Applicants are reminded that functional recitation(s) using the word and/or phrases "for", "adapted to", or other functional language (e.g. see claim 14 which recites "portal for") have been considered but are given little patentable weight because they fail to add any structural limitations and are thereby regarded as intended use language. To be especially clear, all limitations have been considered. However, a recitation of the intended use of the claimed product must result in a structural difference between the claimed product and the prior art in order to patentably distinguish the claimed product from the prior art. If

the prior art structure is capable of performing the intended use, then it reads on the claimed limitation. *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) ("The manner or method in which such a machine is to be utilized is not germane to the issue of patentability of the machine itself."); *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). See also MPEP §§ 31.06 II (C.), 2114 and 2115. Unless expressly noted otherwise by Examiner, the claim interpretation principles in the paragraph apply to all examined claims currently pending.

45. For compact prosecution purposes and should Applicant overcome the prior art rejections noted above, Applicant is reminded that optional or conditional elements do not narrow the claims because they can always be omitted. See *e.g.* MPEP §2106 II C.: "Language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation. [Emphasis in original.]; and *In re Johnston*, 435 F.3d 1381, 77 USPQ2d 1788, 1790 (Fed. Cir. 2006) ("As a matter of linguistic precision, optional elements do not narrow the claim because they can always be omitted.").

kk. For example, claim 1 states "*in the event* that an accept service request message is received."

46. Note, in this case claim 1 is a method claim that recites the limitation "sending the accounting certificate from the subscriber terminal via the mobile communications network." Based upon the broadest reasonable interpretation standard, Examiner finds that a "network" is hardware (see definition of "network"). Thus, Examiner interprets claims 1-13 as necessarily requiring a machine because a network is hardware.

47. Note, in this case claim 14 recites a PKI portal. Based upon the broadest reasonable interpretation standard, Examiner finds that a "portal" is hardware (see definition of "port"). Thus, Examiner interprets claim 14 as necessarily requiring a machine because memory is hardware.

Conclusion

48. Applicant's amendment filed on February 29, 2012 necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

49. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

50. Because this application is now final, Applicant is reminded of the USPTO's after final practice as discussed in MPEP §714.12 and §714.13 and that entry of amendments after final is *not* a matter of right. "The refusal of an examiner to enter an

amendment after final rejection of claims is a matter of discretion.” *In re Berger*, 279 F.3d 975, 984, 61 USPQ2d 1523, 1529 (Fed. Cir. 2002) (citations omitted). Furthermore, suggestions or examples of claim language provided by Examiner are just that—suggestions or examples—and do not constitute a formal requirement mandated by Examiner. Unless stated otherwise by an express indication that a claim is “allowed,” exemplary claim language provided by Examiner to overcome a particular rejection or to change claim interpretation has *not been addressed* with respect to other aspects of patentability (*e.g.* §101 patentable subject matter, §112, 1st paragraph written description and enablement, §112, 2nd paragraph indefiniteness, and §102 and §103, prior art). Therefore, any claim amendment submitted under 37 C.F.R. §1.116 that incorporates an Examiner suggestion or example or simply changes claim interpretation will nevertheless require further consideration and/or search and a patentability determination as noted above.

51. Any inquiry of a general nature or relating to the status of this application or concerning this communication or earlier communications from Examiner should be directed to Chrystina Zelaskiewicz whose telephone number is 571.270.3940. Examiner can normally be reached on Monday-Friday, 9:30am-5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the Examiner’s supervisor, Andrew Fischer can be reached at 571.272.6779.

52. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://portal.uspto.gov/external/portal/pair> <<http://pair-direct.uspto.gov>>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866.217.9197 (toll-free).

/Chrystina Zelaskiewicz/
Primary Examiner, Art Unit 3621